

REMARKS

Claims 38, 39, 45-51, 59, 60, 62, 63, 65, 66 and 68-79 are pending in this application. By this Amendment, claims 45-47, 49-51, 59-60, 62, 65, 68, 70-75, and 77 are amended for clarity and consistency, and independent claims 51, 59, 62, 65, 68, and 70-72 are amended to even more clearly distinguish over the applied references. The amendments are supported in the specification by at least page 6, line 8, to page 7, line 21, and Figs. 4a-5(g).

I. 35 U.S.C. §112 Rejection

Claims 38, 39, 45-51, 70 and 73-79 are rejected under 35 U.S.C. §112, second paragraph as being indefinite. By this Amendment, these claims have been amended for clarity. It is respectfully requested that this rejection be withdrawn.

II. 35 U.S.C. §102 and §103 Rejections

Claims 38, 39, 45, 47, 70, 71 and 73-78 are rejected under 35 U.S.C. §102(e) over Graham et al. (U.S. Pat. Publication. No. 2003/0235678); claims 59, 60, 62, 63, 65, 66, 68 and 69 are rejected under 35 U.S.C. §102(b) over Heilmeier (U.S. Pat. No. 3,600,061); claims 38, 39, 70, 75 and 76 are rejected under 35 U.S.C. §102(b) over Hirose (U.S. Pat. No. 6,022,647); claims 38, 48, 70, 75 and 76 are rejected under 35 U.S.C. §102(e) over Kanbe et al. (U.S. Patent No. 6,696,225); claims 46 and 72 are rejected under 35 U.S.C. §103(a) over Graham; and claim 79 is rejected under 35 U.S.C. §102(e) over Kanbe in view of Sirringhaus et al. (U.S. Patent No. 6,723,394). The rejections are respectfully traversed.

A. Independent Claims 70, 71, and 72

With regard to independent claims 70, 71, and 72 and the rejections based on Graham, Hirose, and Kanbe, these applied references fail to disclose a patterning method involving the depositing of a first liquid material on a substrate surface adjacent to a first side of an indent formed in the substrate surface; and the depositing of a second liquid material on the substrate

surface adjacent to a second side of the indent, with the first and second sides of the indent having an edge that repels spreading of the first and second liquid materials into the indent.

Graham discloses a printable adhesive article (see paragraph [0001]) having a first major surface 316 and depressed microstructured elements 320 (see Fig. 3) that acts as a receptor medium for ink drops (see paragraph [0016]). However, Graham does not disclose or suggest that those ink drops are placed using a method that deposits a liquid on surface 316 such that edges formed on elements 320 repel spreading of the ink drops into elements 320.

Hirose at Figs. 1A-3D discloses a flat substrate 1 without an indent formed in substrate 1. Similarly, Kanbe at Figs. 1(b), 2(a)-3, and 5(a)-5(d) discloses a flat substrate 1 and flat bases 100, 200, and 300 without an indent formed in those substrates. Hirose and Kanbe therefore do not disclose or suggest a substrate with an indent formed in the substrate surface.

B. Independent Claims 59, 62, 65, and 68

With regard to independent claims 59, 62, 65 and 68, and the rejection based on Heilmeier, this reference fails to disclose a patterning method for depositing a liquid onto a surface of a substrate involving the step of selecting a distance between falling edges so that a greater volume of liquid is deposited and retained than in the absence of at least one of a first and second indent.

Heilmeier at Figs. 1-3 discloses support plates 11 and 12 with grooves 14 and 15, respectively, and a liquid crystal layer 13 contained within the grooves of each support plate. However, Heilmeier does not disclose the spacing grooves 14 and 15 to achieve a greater volume of liquid crystal on either plate 11 or plate 12. In fact, Heilmeier expressly discloses that the volume of liquid crystal layer 13 is limited (and thus not based on a distance between grooves 14 and 15) when excess volume is ejected from the space between plates 11 and 12 to flow into grooves 14 and 15. See Heilmeier at col. 2, lines 16-17. Furthermore, Heilmeier

teaches away from modifications that increase the volume of liquid crystal layer 13 because the maximum volume of liquid crystal layer 13 is limited by the spacing provided between plates 11 and 12, as shown in Fig. 1.

In view of the foregoing, the Graham, Hirose, Kanbe, and Heilmeyer, alone or in combination, fail to disclose all of the features recited in the independent claims or the dependent claims thereof. It is respectfully requested that the rejections be withdrawn.

III. Conclusion

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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Attachment:

Petition for Extension of Time

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